

Information and Communication Technologies (ICT) way to enhance standard of Primary Education

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Abstract— *Technology and ICT have been drivers that have re-engineered our society and commerce in recent years. The creative use of Information and Communications Technology (ICT) in primary education has the capacity to increase the quality of stakeholder's lives by enhancing teaching and learning. This needs a shift within the delivery and pedagogy employed in the present primary education system. The aim of this paper is to put forth benefits of Information and Communication technologies (ICT) in standards of primary education.. In this context, individual teachers have exploited the potential of ICT to complement their own pedagogical practices, and to extend their children's learning.*

The Primary School Curriculum promotes the use of ICT to enhance teaching and learning across the curriculum. The curriculum integrates ICT into the teaching and learning process and provides children with opportunities to use modern technology to enhance their lives

Keywords—Curriculum, Information and Communication Technologies [ICT], pedagogy Learning, pedagogical practices, stakeholders.

I. INTRODUCTION

ICT has the potential to “bridge the knowledge gap” in terms of improving quality of education in India. Technology and ICT have been drivers that have re-engineered our society and commerce in recent years. The creative use of Information and Communications Technology (ICT) in primary education has the capacity to increase the quality of society lives by enhancing teaching and learning. In recent years, several studies and reports have highlighted the opportunities and the potential benefits of information and communication technologies (ICT) for improving the quality of primary education. ICT is viewed as a “major tool for building knowledge societies” (UNESCO 2003, 1) and, particularly, as a mechanism at the primary school education level that could provide a way to rethink and redesign the educational systems and processes, thus leading to quality education for all .

ICT enabled primary education can ultimately cause the group action education, particularly in developing countries like India, effective use of ICT for the purpose

of primary education has the potential to bridge the digital divide. Primary education drives the aggressiveness and building a powerful new generation in Republic of India. Primary School Education System in India is the future of our country. There are various schools in India and many new one are also coming up. Different types of schools like residential schools, boarding schools, government schools, day schools, primary schools and secondary schools operate in the country. Most of the schools these days have world class facilities including the best teachers to provide quality education to children. Most of the primary schools are now ready to accept ICT for enhance the quality of primary education. But facing some barriers while implementing it.

II. LITERATURE REVIEW

Albert Sangrà* and Mercedes González-Sanmamedb in his research paper “The role of information and communication technologies in improving teaching and learning processes in primary and secondary schools” concluded that, The integration of ICT is as a resource and a strategic element for the innovation and the improvement of teaching and learning processes. Or to change the teaching models, the teacher's role, issues regarding classroom organization, the teaching and learning processes. The teaching staff has a fundamental role in determining what to teach and how to teach it (and what the students are going to learn) using ICT.

Peter Ruddin his paper “School Improvement through ICT: Limitations and Possibilities” mentioned that As increasing amounts of money are spent on ICT and new learning infrastructures in primary schools, it is important that these two areas of educational research and practice should be brought closer together. So that it will be more beneficial to schools, teachers, students and parents.

Bottino (2003) and Sharma (2003) mention that the use of ICT will improve performance, teaching, administration, and develop relevant skills within the deprived communities. It conjointly improves the quality of education by facilitating learning by doing, real time spoken communication, delayed time spoken communication, directed instruction, self-learning, drawback finding, data seeking and analysis, and

emending thinking, similarly because the ability to speak, collaborate and learn (Yuen et al, 2003).

Casals(2007)mentioned that ICTs conjointly offer a platform for sharing data and information. ICT will play a valuable role to monitor and log the progress of the students across time, place and varied activities. Mooij (2007) states that differentiated

ICT-based education will be expected to offer bigger responsibility, validity potency of knowledge assortment and bigger easy analysis, evaluation, and interpretation at any instruction level. In absence of ICT, most of the responsibility of teaching and learning lies on the academics. However, with the facilitate of ICT one will transfer the responsibilities to the scholars therefore that they will self manage. Mooij additionally puts forth the read that ICT-based registration, evaluation, Associate in nursing administration helps to link totally different levels of info and facilitate an overall read of new whole instructional setup. It facilitates the analysis and examination of the training method and results by the scholars and also the folks in an exceedingly versatile and convenient approach.

Innovative use of Information and Communication Technology can potentially solve this problem. Education is the driving force of economic and social development in any country. Considering this, it is necessary to find ways to make education of good quality, accessible and affordable to all, using the latest technology available. The last two decades have witnessed a revolution caused by the rapid development of Information and Communication Technology (ICT). ICT has the potential to remove the barriers that are causing the problems of low rate of education in our country. It can be used as a tool to overcome the issues of cost, less number of teachers, and poor quality of education as well as to overcome time and distance barriers (McGorry, 2002)..

III. RATIONALES FOR INTRODUCING ICT IN PRIMARY EDUCATION

Individuals have to access information via ICT to keep space with the latest. In such a state of affairs, education, that continually plays an essential role in any economic and social growth of a rustic, becomes even a lot of necessary. Primary Education not solely will increase the productive skills of the individual however conjointly his earning power. It offers him a sense of well-being as well as capability to absorb new concepts, will increase his social interaction offers access to improved health and provides many a lot of intangible advantages .The varied types of CT product out there and having conation to Primary education, such as teleconference, audio, TV lessons, radio broadcasts, audiocassettes and CD ROMs

etc have been used in education for totally different functions.

Table.1: Rationales for introducing ICT in Primary education

Rationale	Basis
Sharing	<i>Playing through various sharing tools (Tablets, Videogames)</i>
Development	<i>counseling child to be a good human being from childhood.</i>
Catalytic	<i>Utility of technology to improve performance and effectiveness in teaching, management and many other social activities.</i>
Pedagogical	<i>To utilize technology in enhancing learning, flexibility and efficiency in curriculum delivery</i>

Today ICTs—including laptops wirelessly connected to the web, personal digital assistants, low value video cameras, and cell phones have become reasonable, accessible and integrated in massive sections of the society throughout the world. It will reconstitute organizations, promote collaboration, increase democratic participation of voters, improve the transparency and responsiveness of governmental agencies, build education and health care additional wide accessible, foster cultural creativeness, and enhance the development in social integration. It is solely through education and the integration of ICT in education that one will teach students to be participants within the growth method during this era of speedy amendment.

Use of ICT in primary education develops various skills like co-operating with each other, sharing and adjust with real world issues. It improves the perception and understanding the situation.

ICT can be used as a tool in the process of Primary education in the following ways:

- 1) **Informative tool:** It provides informative data in various formats such as audio, video multimedia.
- 2) **Situating tool:** It creates situations, which the student experiences in real life. Thus, simulation and virtual reality is possible.
- 3) **Constructive tool:** To draw various pictures/images & coloring.
- 4) **Communicative tool:** It can help to enhance communication skill from childhood

The following mediums are used for the delivery and for conducting the education process:

- 1) **Voice** – Instructional audio tools that include interactive technologies as well as the passive ones.

- 2) **Video** - Instructional video tools that include still images, prerecorded moving images, and real-time moving images combined with audio conferencing.

Advantages of ICT in primary Education:

- 1) Eliminating time barriers in education for learners as well as teachers
- 2) Enhanced group collaboration made possible via ICT within children.
- 3) New educational approaches can be used.
- 4) It improves the national dimension of primary educational services
- 5) It allows for just in time and fundamental education to child
- 6) It can also be used for non-formal education like health campaigns and literacy campaigns .

By studying the secondary data sources in detail the following main benefits of using ICT in primary education for various stakeholders is summarized

Table.2: Benefits of ICT in primary education to the main stakeholders.

Stakeholder	Benefits
Student	<ul style="list-style-type: none"> ➤ enhance communication skill, ➤ Increase sharing attitude, ➤ Learner-centered approach, ➤ Improves quality of primary education and new ways of interaction.
Teachers	<ul style="list-style-type: none"> ➤ High quality, cost effective professional development in the workplace, ➤ Upgrading of teaching skills, increased productivity, ➤ Increasing awareness of innovative Teaching methodology.
Non-Teaching Staff	<ul style="list-style-type: none"> ➤ Searching and updating is flexible ➤ Development of a new working culture ➤ Increase efficiency and minimize the workload

Governments

- Increase the capacity and cost effectiveness of primary education and training systems,
- To support and enhance the quality and relevance of existing Primary educational structures,
- To ensure the connection of primary school and curricula to the emerging networks and information resources,

IV. BARRIERS OF USING ICT IN PRIMARY EDUCATION

In Indian school education system ICT have a great role to enhance the quality of primary education. But, there are some barriers to make the school education completely ICT based. They are as follows-

1. Lack of teacher's competency to handle ICT equipment's, is one of the biggest barrier in Indian school education system for making it ICT based.
2. Lack of infrastructures and equipments are another problems for back warding primary school education than other country,
3. Lack of interest in teachers and learners keep ICT in the school education
4. Lack of investigation for fruitful schemes of ICT.

V. CONCLUSION AND SUGGESTIONS

Quality in primary education through ICT and its awareness among stakeholders will have positive impact on the society. ICT can be helpful in quality and standards of education by implementing it in primary phases of education. ICT can be employed in formal and Non-formal types of primary education and would eventually make the learners employable and socially useful part of the upcoming generation. By employing ICT in teacher training can save a lot of money of the Government.

By employing ICT in administration can help in solving the problem of Absenteeism of students and teachers. Good quality content is one of the major issues and directly affects the standards of education and quality. By overcoming the certain challenges involved in the process of primary education can help a lot in this side. Conclusively a lot of quality improvement is going on after careful and planned implementation of ICT in school education by various stakeholders.

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